

**"New Horizons —  
SOLUTIONS FOR THE 21<sup>ST</sup> CENTURY"**

**Kansas City, Missouri  
June 3-6, 2001**



**2001  
Energy**

**An Energy Efficiency Workshop & Exposition**

**Sponsored by  
Federal Energy Management Program  
U.S. Department of Energy**

**Co-sponsored by  
U.S. Department of Defense and the U.S. General Services Administration**





## *“Going to Kansas City, Kansas City Here I Come . . .”*

*“I just want to say thank you for organizing such an informative and productive event. Most of us have little time to explore the new advances in energy savings, and Energy 2000 helped update my resources in this area. Keep up the good work and I will see you next year in Kansas City.”*

— Bill Sample  
U.S. Secret Service

Comments like this were typical of the reaction of the attendees at Energy 2000 in Pittsburgh in August. More than 1100 government and private sector energy management professionals spent three days listening to presentations on the latest energy-saving strategies and projects, meeting with their colleagues to discuss new applications, visiting more than 100 exhibit booths to see the new products and services, and sharing their energy-saving experiences and success stories.

**Y**ou can get more details on the complete program at our website: [www.energy2001.ee.doe.gov](http://www.energy2001.ee.doe.gov). Check the site often for program updates, changes and other information.

Who comes to these workshops? An analysis of attendees from last year shows that 40 percent were from Federal civilian agencies, 17 percent from industry, 11 percent from Federal defense agencies, 9 percent ESCOs and utilities, 5 percent state and local governments, 3 percent universities, 3 percent National Guard, and the rest from miscellaneous Federal agencies and the private sector.

The theme for this year's workshop is “New Horizons – Solutions for the 21<sup>st</sup> Century.” With that in mind, we've taken the best of Energy 2000 and built on it to make Energy 2001 even more valuable for you. This fourth annual national workshop for energy professionals, which will be held in Kansas City June 3-6, 2001, will include new tracks and expanded sessions, more opportunities for networking with your colleagues at receptions and special events, and an even bigger trade show to let you see what's new on the market.

Energy 2001 is sponsored by the U.S. Department of Energy's Federal Energy Management Program and co-sponsored by the U.S. Department of Defense and the U.S. General Services

Administration. This annual workshop and exposition will give you valuable knowledge on the latest resources, tools, regulations and techniques to help solve your organization's energy problems. Presentation tracks will cover the following topics:

- acquisition issues
- electric utility deregulation
- facility operations and maintenance
- laboratories and industrial facility issues
- project financing
- renewable applications and water conservation
- sustainable building design
- technology
- and even a basic primer called “Energy 101”

Two technical tours of energy-efficient buildings in the Kansas City area will show you ways that projects can be designed and implemented. Tour number one will be to the Missouri Department of Conservation's new Discovery Center and the world-famous Country Club Plaza. Tour number two is to Utilicorp United's World Headquarters and EPA's Region VII Headquarters. See more details on page 6. Receptions each evening will give you time to meet with other energy professionals from around the country to share experiences and needs. And a special Tuesday evening barbeque and fun event at Science City in Union Station will entertain you and your family and give all attendees a chance to spend more time together.

A highlight of the workshop will be presentations by several invited guest speakers. Bob Berkebile, a principal of BNIM Architects, will speak at the opening plenary session. He has led the sustainable design work on a variety of projects including the Missouri Department of Conservation's Discovery Center, a new benchmark office building for the Grand Canyon National Park, and two new educational facilities for the University of Texas Health Sciences Center and Mental Science Institute.

The closing luncheon speaker will be award-winning speaker, trainer, and consultant Keith Harrell, author of “Attitude is Everything.”

Check the website for more information on all the workshop speakers.



**Bob Berkebile**

Photo Courtesy of BNIM Architects

## Hyatt Regency at Crown Center

The workshop will be held at the Hyatt Regency in the city's famed Crown Center, a unique "city within a city" adjacent to the international headquarters of Hallmark Cards. More than 80 specialty shops, a dozen restaurants and food outlets and a number of entertainment attractions are easily accessible via "The Link," an enclosed elevated walkway connecting the hotel to the complex. Crown Center also includes the American Heartland Theatre with Broadway-style performances, the Coterie Theatre offering productions for the entire family, and the six-screen Crown Center Cinemas.



Photo Courtesy of  
Hyatt Hotels & Resorts

The 42-story Hyatt features three restaurants and three lounges, including a spectacular city view from its rooftop revolving restaurant. The hotel is fully accessible for persons with disabilities. There is also a sparkling pool, two lighted tennis courts, a fully-equipped health club, and nearby golf courses. And best of all, attendees at Energy 2001 will enjoy all this at the prevailing Federal government hotel rate! Make your reservations now to guarantee your room at the Hyatt Regency Crown Center. Call the Hyatt at 816-421-1234 for more information.

### *What you need to know about Energy 2001*

**Who:** Energy 2001 is sponsored by the U.S. Department of Energy's Federal Energy Management Program and co-sponsored by the U.S. Department of Defense and the U.S. General Services Administration.

**What:** It is the nation's premier gathering of energy managers looking for ways to identify and procure cost-effective energy-saving, renewable energy and water efficiency products and equipment. This will be the fourth annual national energy management workshop and trade show for Federal, state, local and private sector energy managers, energy service companies, utilities, procurement officials, engineers and others involved in energy management around the country.

**Where:** The Hyatt Regency Crown Center in Kansas City, Missouri.

**When:** The program opens with a free pre-workshop session, "How to Do Business with the Federal Government," from 3 p.m. to 5 p.m. on Sunday, June 3. There is a reception at 6 p.m. that evening that kicks off the official workshop. The opening plenary session and a

full buffet breakfast takes place on Monday morning. The workshop concludes with a luncheon on Wednesday, June 6. Optional training programs will be held before and after the workshop. Visit the website for full details.

**Why:** Energy 2001 helps government and private sector energy managers do their jobs better by showing the latest strategies, products and resources available today.

**Cost:** Register early to save big! Team discounts (4 or more from the same company) are just \$350 each if you register by March 31. Individuals registering by that date pay just \$395 each. Regular registration after March 31 is \$495. The fee includes all sessions, three breakfasts, three lunches, three receptions, breaks, the Tuesday night gala at Union Station, and unlimited rides on the Kansas City trolley. Special one-day registrations are also available for \$295.

**How to register:** You can register online, by fax or by mail. Check out the registration form on page 31 of this brochure or visit the website: [www.energy2001.ee.doe.gov](http://www.energy2001.ee.doe.gov).

## Why Kansas City?

*If you have to ask that question, you probably haven't been there.*



It's a great place to enjoy the outdoors. Wherever you go in the area, you'll see tree-lined boulevards and parks. Kansas City, in fact, has more fountains than any city in the world except Rome, and more boulevard miles than Paris. It's a clean, clear and uncongested place that offers spectacular nightlife with jazz, blues, rock and even big band performances. While shopping probably wasn't invented here, the shopping center was. The Country Club Plaza is the nation's first shopping center and is still a great place to shop today. You know about Kansas City steaks and barbeque, of course, but these traditions have been joined by culturally diverse culinary creations to make for wonderful dining opportunities.

The city has more professional theatres than any other American city its size. The Nelson-Atkins Museum of Art is the largest between the Great Lakes and the Pacific Ocean. And the people of Kansas City are well-known for their hospitality that, as much as their geographic location, makes the city the heart of the nation.

You can find out all about Kansas City on the workshop website: [www.energy2001.ee.doe.gov](http://www.energy2001.ee.doe.gov). Whether you're coming to Energy 2001 alone for just a couple of days or bringing your family for summer vacation, there's plenty to see and do in the area.



## The Kansas City Trolley

All Energy 2001 registrants will receive a complimentary ticket for unlimited use of the Kansas City Trolley from Sunday, June 3, through Wednesday, June 6. The trolley operates Monday through Saturday, 10 a.m. to 10 p.m., and from 10 a.m. to 6 p.m. on Sunday.

The trackless trolley gives you a narrated tour that is approximately two hours, stopping at more than 15 areas of interest around the city. You'll hear the stories and see the sights that make Kansas City a city of surprises. The trolley route goes through the city's main corridor (River Market, Downtown, Crown Center, Country Club Plaza and Westport). Passengers may get on and off the trolley as many times as they wish.

You can get on the trolley at the Hyatt or Westin. Your stops range from breathtaking fountains to eye-catching shops, and include many of the city's major art, music and theatre spots, fine restaurants, popular night spots and more.

Discounted trolley tickets for your guests can be purchased at the Energy 2001 registration desk.



# *The Tuesday Night Gala: Barbeque Meets Science*

## *Have we planned a night for you!*

It starts with your visit to historically rich Union Station, just a short walk from the Hyatt and Westin along The Link walkway. Enjoy a Kansas City barbeque in the Sprint Festival Plaza of this recently-restored historical building, catered by one of the city's famous barbeque restaurants.

The Plaza, more than a football field in length and former location of the station's North Waiting Room, now serves as the grand entry into Science City, a spectacular world-class entertainment and education attraction. Science City combines the best of museums, science centers, theme parks and theatre into an indoor city where you don't just learn about science and history, you experience it! And it is exclusively ours tonight!

Adults and kids alike will have a great time searching for fossils at a dig site, solving a mystery in the crime lab and tracking a tornado. Broadcast the weather. Train for life in space. Navigate a helicopter and even walk through the human body.

Design your own robot. Work on a high-tech farm. Walk through decades of Kansas City history. Enjoy bands, performers and cultural events. It's all there for you, in our Energy 2001 Evening in Science City.

All this is included in your workshop registration fee. Extra tickets will be for sale for your family and guests.

You can get more information on Science City at [www.sciencecity.com](http://www.sciencecity.com).



*Science City — a fun evening  
for you and your entire family!  
And it's all ours on this  
special evening.*



Photos Courtesy of Convention and Visitors Bureau of Greater Kansas City



## Optional Technical Tours



Sunday, June 3

### **Tour 1:**

#### ***Discovery Center; Country Club Plaza***

***12 p.m. – 5 p.m.***

An alternative-fueled tour bus will pick you up at the Hyatt at noon and go directly to one of the city's famous barbeque restaurants near the Country Club Plaza for lunch. Kansas City barbeque is generally accepted as the best in the world, and your lunch will be in one of Kansas City's finest barbeque restaurants.

At 2 p.m., the bus will take a very short trip to the Missouri Department of Conservation's new Discovery Center. The Discovery Center is both a headquarters and green design education tool for the Department. This exciting building demonstrates green design practices at their ultimate, using the cutting edge in green materials, green construction techniques, construction waste management and efficient and alternative energy systems. Because this building will be under construction (although mostly completed), participants will get to see some of the construction in progress.

At the end of the tour, participants may return to the Hyatt or use the remainder of the day to visit and shop at the world-famous Country Club Plaza. They can then catch the Plaza Trolley back to the Hyatt until 6:00 p.m. (all attendees will have a free pass for the trolley).

*Fee:* \$25 (includes lunch)

### **Tour 2:**

#### ***Tour of Utilicorp United World Headquarters and EPA Region VII Headquarters***

***2 p.m. – 5:30 p.m.***

The bus will leave the Hyatt at 2 p.m. to visit the Utilicorp United World Headquarters in downtown Kansas City. This building is an award-winning green renovation of the historic New York Life Building, one of the first skyscrapers in Kansas City. In the Utilicorp Visitor Center, participants will see displays of the construction of the original turn of the century building through the innovative renovation of the current structure. Participants will see examples of daylighting, integrated lighting systems, advanced HVAC controls, ice storage and other innovative systems.

After the Utilicorp tour ends, the group will then take the short trip to Kansas to visit the Environmental Protection Agency Region VII Headquarters. Just over a year old, EPA worked hard to make this building fit their mission. Its energy-efficient design and substantial use of green materials is beautifully wrapped in a glass and stone exterior.

The tour bus will return you to the Hyatt at approximately 5:30 p.m.

*Fee:* \$25 (does not include lunch)

***Space on the tours is limited so sign up early!***

### ***Energy 2001 will be a "Green Meeting."***

To keep with the green policies set by the sponsors, paper copies of presentations will not be distributed. Presentations will be posted on the web at the conclusion of the workshop. Find out more about this and other green strategies on our website: [www.energy2001.ee.doe.gov](http://www.energy2001.ee.doe.gov).

This brochure and most other Energy 2001 materials are printed on recycled paper with vegetable- or soy-based ink. We have also encouraged paperless registration using our website. When possible, transportation to site visits will be via alternative-fueled vehicles.

Instead of printing the complete attendee list, it will be posted on the website at the conclusion of the workshop (last year's attendee list filled 74 pages).

Our host hotel, the Hyatt Regency Crown Center, recycles approximately 70 tons of cardboard each year, and has extensive paper and aluminum recycling programs. They also purchase items made from recyclables whenever possible.

***"Energy 2000 was the best Federal Forum on the energy initiative I have ever been to. In my opinion, if you want to meet and do business with the decision-makers and influencers for the Federal Government, you should be at Energy 2001."***

***— Jack DiEnna  
Geothermal Heat Pump Consortium, Inc.***

# Specialized Learning Tracks



## Acquisition

The Acquisition Track will be composed of presentations on the acquisition of energy-related products and services, concentrating on areas which are currently of particular interest in the federal acquisition community. These will include energy savings performance contracting, green and energy efficient products procurement, DOD utility privatization and procurement of energy products and related services against GSA contracts.



## Electric Utility Deregulation

Utility companies have sold off generation plants; distribution is occurring differently state-by-state. Learn what's in store for you from your Public Utility Commission. Learn what distribution services may be offered from local distribution companies. Curious about Power Brokers? Learn the economics of generation. Ask questions during a no-holds panel discussion. This track will provide the latest information for your future electric purchases.



## Energy 101

New energy managers, are you in the dark? Old energy dogs, learn new tricks and get back up to speed! Become a mission-critical person to your agency by learning the basics of energy management concepts. Learn about tools and resources for getting your facility's needs and agency energy projects evaluated, financed, and managed. Gain skill in selling your ideas to your agency's procurement, legal, finance, and management staff. Find out how your peers are tackling their energy management issues and projects. You can do it, too.



## Facility Operations and Maintenance

Facility managers are responsible for much more than just turning a building on or off and maintaining the facility equipment. In an era of budgetary tightening, high emphasis on customer service, and ever changing technologies, a facility manager must learn from others in the industry. This track will showcase real world examples of innovative approaches to Indoor Air Quality, Controls, Energy Audits, Commissioning, Measurement and Verification, and Water Efficiency.



## Laboratories and Industrial Facilities

Laboratories and industrial facilities are often energy intensive and expensive to operate. Executive Order 13123 now requires agencies to reduce energy consumption in these facilities by 20% by 2005 and 25% by 2010 relative to 1990. It also removed the exemption for most of these types of facilities. This track will help participants identify opportunities to improve the performance in energy intensive facilities. It will provide tools and case studies as well as introduce participants to resources including a new network of professionals involved in the Laboratories for the 21st Century.



## Project Financing

The Project Financing track will present intermediate and advanced level topics concerning alternative financing for federal energy projects. Sessions will include "news you can use" such as tools for making confident decisions on alternatively-financed projects, best practices, how to know you are getting the best interest rate for your project, agency policies impacting project financing and more. Basic "intro to" information on various project financing mechanisms will be available in the Energy 101 Track.



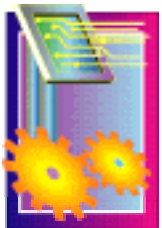
## Renewable Applications & Water Conservation

Using renewable energy applications and water conservation strategies makes economic sense and is often the most cost-effective option in both new construction and building retrofits. Our presenters will examine a variety of successful applications including wind, geothermal, solar, biomass and other innovative technologies. We will look at system design, sizing, the nuts and bolts of each application, including financing alternatives, and what it takes to pull it all together for a successful project.



## Sustainable Building Design

If you're a facility manager, do you want to learn how Executive Order 13123, Sustainable Building Design requirements, have been implemented by your Federal peers? Want to learn actual strategies for recycled buildings? How old are your facilities? Step-by-step "big" building renovation for ISO 9000 compliance presentation; DDC/BACnet; Does your equipment talk to each other? Will you ever integrate all your facilities into your energy management computer program? Learn "how-to" for large and small facilities.



## Technology

Keeping up with technology and best practices is a continuous challenge. The sessions in this track provide an overview of technologies essential to an effective energy-efficiency program. Sessions will describe new and established technologies, provide essential information on their performance, success stories, what to avoid, and what's in the pipeline.


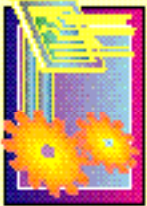





## Agenda-At-A-Glance

<b>Saturday, June 2</b>		12:00 noon to 6:00 p.m. — Registration			
<b>Sunday, June 3</b>		10:00 a.m. to 7:00 p.m. — Registration			
12:00 p.m. — 2:00 p.m.		Optional Tour 1: Discovery Center and Country Club Plaza			
2:30 p.m. — 6:00 p.m.		Optional Tour 2: Utilicorp Headquarters and EPA Regional Headquarters			
3:30 p.m. — 6:00 p.m.		Optional Pre-Workshop Training Program — "How to Do Business with the Federal Government"			
6:30 p.m. — 8:00 p.m.		Opening Reception in Exhibit Hall			
<b>Monday, June 4</b>		7:00 a.m. to 8:00 p.m. — Registration			
7:30 a.m. — 8:30 a.m.		Bullet Breakfast			
8:30 a.m. — 12:00 a.m.		Opening Plenary			
10:00 p.m. — 10:30 p.m.		Break — Exhibit Opens			
Be sure to visit our website at <a href="http://www.enr2001.enr.com">www.enr2001.enr.com</a> for all the latest agenda updates and other information.					
	<b>Exhibit 101</b>	<b>ELECTRIC UTILITY DISRUPTION</b>	<b>FACILITY OPERATIONS AND MAINTENANCE</b>	<b>RENEWABLE APPLICATIONS AND WATER CONSERVATION</b>	
10:30 a.m. — 12:30 p.m.	The Big Picture/ Keeping up With the Joneses	Does Mother Know Best?	Continuous Commissioning, Measurement, and Verification	Photovoltaic System Design and Sizing	
12:30 p.m. — 2:30 p.m.		Lunch in Exhibit Hall			
2:30 p.m. — 4:00 p.m.	Getting Started	How GSA and DOD Will Cope with Electric Utility Purchases	Building Controls	Renewables and Executive Order 13123	
4:30 p.m. — 6:00 p.m.		Reception in Exhibit Hall			
<b>Tuesday, June 5</b>		7:00 a.m. to 8:00 p.m. — Registration			
8:30 a.m. — 9:00 a.m.		Coffee and Danish			
9:30 a.m. — 11:30 a.m.	Rules of Thumb	Buyer Beware: The Only Negotiable Part of the Electric Bill	Operations and Maintenance Energy Audit	The Power of Wind	
10:30 a.m. — 11:00 a.m.		Coffee Break in Exhibit Hall (Exhibit Opens at 9:30 a.m.)			
11:00 a.m. — 12:30 p.m.	Selling Your Ideas to the Powers That Be	Local Distribution Companies	Water — A Bare Necessity	Solar Savings & Flying the Solar Sides	
12:30 p.m. — 2:00 p.m.		Lunch in Exhibit Hall			
2:30 p.m. — 3:30 p.m.	Show Me the Money!	The Middlemen: Marketing Plans of Energy Providers	GUARDing our Energy Resources	Chemical Gas	
3:30 p.m. — 4:00 p.m.		Coffee Break in Exhibit Hall			
4:30 p.m. — 6:00 p.m.	Energy Awareness Programs	Golden Cocks To Avoid Peak Demand Costs	Healthy Buildings	Geothermal Technologies and Capabilities	
6:30 p.m. — 8:00 p.m.		Light Reception in Exhibit Hall — Prize Drawings, Exhibit Hall Closes			
8:30 p.m. — 7:00 p.m.		Travel time to Union Station			
7:30 p.m. — 12:00 p.m.		Gala Event at Union Station			
<b>Wednesday, June 6</b>		7:00 a.m. to 11:00 a.m. — Registration			
7:30 a.m. — 8:00 a.m.		Coffee and Danish			
8:30 a.m. — 9:30 a.m.	Keeping It Going!	Deregulation, Load Management, and Environmental Issues	Maintaining Facilities	Water Jeopardy!	
9:30 a.m. — 12:00 a.m.		Coffee Break			
10:00 a.m. — 11:30 a.m.	Union Station Tour	What You Don't Understand About Electric Deregulation	Energy Efficiency in Federal Housing	Innovative Applications	
11:30 a.m. — 12:00 p.m.		Break			
12:00 p.m. — 2:00 p.m.		Closing Plenary — Seated Lunch			
2:30 p.m. — 5:00 p.m.		Optional Agency Meetings			



# Agenda-At-A-Glance

<b>Saturday, June 2</b>		12:00 noon to 6:00 p.m. — Registration			
<b>Sunday, June 3</b>		10:00 a.m. to 7:00 p.m. — Registration			
12:00 p.m. — 6:00 p.m.		Optional Tour 1: Discovery Center and Country Club Plaza			
2:00 p.m. — 6:30 p.m.		Optional Tour 2: USF Corp Headquarters and EPA Regional Headquarters			
8:00 p.m. — 8:00 p.m.		Optional Pre-Workshop Training Program — "How to Do Business with the Federal Government"			
8:00 p.m. — 8:00 p.m.		Opening Reception in Exhibit Hall			
<b>Monday, June 4</b>		7:00 a.m. to 6:00 p.m. — Registration			
7:30 a.m. — 8:30 a.m.		Bullet Breakfast			
8:30 a.m. — 10:00 a.m.		Opening Plenary			
10:00 a.m. — 10:30 a.m.		Break — Exhibit Opens			
<p>Be sure to visit our website at <a href="http://www.weg2001.usace.gov">www.weg2001.usace.gov</a> for all the latest agenda updates and other information.</p>	 <p><b>SUSTAINABLE BUILDING DESIGN</b></p>	 <p><b>TECHNOLOGY</b></p>	 <p><b>PROJECT FINANCING</b></p>	 <p><b>ACQUISITION</b></p>	 <p><b>LABORATORIES AND INDUSTRIAL FACILITIES</b></p>
10:35 a.m. — 12:30 p.m.	Recycled Building Strategies	Combined Cooling, Heat and Power	Alternative Financing for Contracting Offices		
12:35 p.m. — 2:30 p.m.		Lunch in Exhibit Hall			
2:30 p.m. — 4:00 p.m.	Whole Building Design Approaches and Useful Tools	Greening Federal Fleets	Tools for Confident Decision-Making	DOD Utility Privatization	
4:00 p.m. — 6:00 p.m.		Reception in Exhibit Hall			
<b>Tuesday, June 5</b>		7:00 a.m. to 6:00 p.m. — Registration			
8:00 a.m. — 9:00 a.m.		Coffee and Danish			
9:00 a.m. — 10:30 a.m.	Air Quality and Control Design	Lighting	Best Practices on Utility-Financed Projects	"Green" Procurement: Why and How	
10:35 a.m. — 11:00 a.m.		Coffee Break in Exhibit Hall (Exhibit Opens at 10:30 a.m.)			
11:00 a.m. — 12:30 p.m.	New Ways of Doing Business & Confessions of a Recovering Bureaucrat	Controls to Reduce Energy Costs	Best Practices on EOPC Projects	Energy Products and Services on GSA Schedule	
12:35 p.m. — 2:00 p.m.		Lunch in Exhibit Hall			
2:00 p.m. — 3:30 p.m.	Pentagon: On Cost, On Schedule, Built for the Next 50 Years	Walking on Air	Number Crunching		The Laboratories for the 21st Century
3:30 p.m. — 4:00 p.m.		Coffee Break in Exhibit Hall			
4:00 p.m. — 6:00 p.m.	Sustainable Design and Greening Issues	Hot Project Showcases	The Fine Print		High Performance Laboratory Design
6:30 p.m. — 6:30 p.m.		Light Reception in Exhibit Hall — Prize Drawings, Exhibit Hall Closes			
6:30 p.m. — 7:00 p.m.		Transfer time to Union Station			
7:00 p.m. — 10:00 p.m.		Gala Event at Union Station			
<b>Wednesday, June 6</b>		7:00 a.m. to 11:00 a.m. — Registration			
7:00 a.m. — 8:00 a.m.		Coffee and Danish			
8:00 a.m. — 9:30 a.m.	Sustainable Design for Small Facilities	What's New in Fuel Cells	Alternative Financing through RECs, Public Utilities, and Gas LDCs		Federal Industrial Facilities
9:30 a.m. — 10:00 a.m.		Coffee Break			
10:00 a.m. — 11:30 a.m.	Evaluating Power Quality Problems in Existing Facilities	Future Energy Technologies	Down the Road with an Alternately-Financed Project		Laboratory Facility Case Studies
11:30 a.m. — 12:00 p.m.		Break			
12:00 p.m. — 2:00 p.m.		Closing Plenary — Seated Lunch			
2:00 p.m. — 5:00 p.m.		Optional Agency Meetings			



## Energy 101

### Monday - June 4

**Session 1:** 10:30 a.m. - 12:30 p.m.

#### ***The Big Picture/Keeping up With the Joneses***

**Intent:** To provide the “big picture” of today’s energy resources and marketplace, introduce the various goals and laws agencies are expected to meet, and show how your peers are meeting these goals.

**Description:** Our nation’s energy resources have been subjected to considerable supply, demand, and regulatory stress. This session provides a fast-paced introduction to energy price trend lines, restructuring developments, and policy questions that will influence decisions made by federal energy managers. An interactive quiz (with prizes) will help you learn the components of the various Legislation and Executive Orders that affect your agency’s energy activities. Learn how your energy management plans should dovetail with the agency implementation plans developed by your regional/HQ agency energy teams from the National Park Service.

**Speakers:** Morey Wolfson, National Renewable Energy Laboratory; Dave Howard, National Renewable Energy Laboratory; Steve Butterworth, National Park Service; Terry Brennan, National Park Service

**Session 2:** 2:30 p.m. - 4:00 p.m.

#### ***Getting Started!***

**Intent:** To introduce concepts and tools available to assess how your site is using energy.

**Description:** Learn how to read your utility bill. Find out what to ask your utility about alternative rate structures. Be introduced to basic energy management concepts, including energy accounting and tools such as life-cycle costing. See how they apply to a project. This session is a must for those recently assigned as energy coordinators or energy managers!

**Speakers:** Clint Christenson, Johnson Controls, Inc.; Christine Greenberg, Greenberg Energy Consultants

### Tuesday - June 5

**Session 3:** 9:00 a.m. - 10:30 a.m.

#### ***Rules-of-Thumb for Energy-Reduction Opportunities***

**Intent:** To introduce rules-of-thumb for estimating potential energy reduction from some of the best energy efficiency measures. This course provides guidelines for selecting measures for your own facility, whether for an energy reduction project/program or for conducting your own audit.

**Description:** This humorous session will “enlighten” you with rules-of-thumb developed by the National Guard’s experience in determining what measures give the greatest energy reduction return. Also shared will be how to realistically estimate those returns for your agency. You will be introduced to guidelines to evaluate potential projects as well as learn about concepts to consider when conducting a facility audit. Learn better ways to determine what energy efficiency and water conservation measures are appropriate for your facility. This session is well worth your time!

**Speaker:** Don Yuhasz, National Guard

**Session 4:** 11:00 a.m. - 12:30 p.m.

#### ***Selling your Ideas to the Powers-That-Be***

**Intent:** To teach you how to get buy-in from your agency’s/site’s procurement, legal, finance, and management staff.

**Description:** This is an interactive panel of agency COOs, legal, finance, facilities management, and executive management personnel. The discussion promises to be loaded with “real world” issues and to focus on the information and analyses decision makers need before they buy-in to your project. Get insight on what information you need to provide to decision makers to make your project happen!

**Panelists:** Mike Loera, Department of Energy; Len Malamud, Veterans Affairs; Carlos Campos, National Aeronautics and Space Administration; Steve Frankel, National Aeronautics and Space Administration; and Bill Graham, Veterans Affairs





**Session 5:** 2:00 p.m. - 3:30 p.m.

## **Show Me the Money!**

*Intent:* To introduce ways your agency can fund a project, explain how funding alternatives work, and address specific issues; to familiarize you with resources and programs offered by DOE, FEMP, DOD and GSA.

*Description:* This introductory session provides an overview and comparison of project financing alternatives, including appropriations, ESCO, and utility financing. Detailed information about DOE's Super ESPCs, DOD's ESPCs as well as BOAs with utilities and GSA's area-wides are also discussed. Find out where to go for help getting started – assistance from FEMP and GSA's Federal Supply Schedule is explained. Get the necessary information needed to choose the financing mechanism that best fits your needs.

*Speakers:* Randy Steer, Office of Management and Budget; Beth Shearer, Department of Energy; Steve Dunnivant, EMP2, Inc.

**Session 6:** 4:00 p.m. - 5:30 p.m.

## **Energy Awareness Programs**

*Intent:* To show how easy it is to design and implement an energy awareness program at your site.

*Description:* You will learn how to reduce energy use at your site through a no-cost program. The strategy is to promote your coworkers' participation in conserving energy using common sense measures. Come see how you can encourage your coworkers to save energy! Remember, the greenest BTU is the one that is not used!

*Speakers:* Bernie Denno, National Oceanic and Atmospheric Administration; Carl D. Costello, Department of Energy; Scott Wolf, Washington State University

## **Wednesday - June 6**

**Session 7:** 8:00 a.m. - 9:30 a.m.

## **Keeping it Going!**

*Intent:* To introduce operations and maintenance concepts and tools to effectively manage your facilities over the long-term.

*Description:* Learn how to operate your site in a continuous improvement mode and update your energy management plan to reflect your new opportunities and strategies. Understand the benefits of predictive maintenance through tools available to you! Find out how the EPA justified its metering tools to management and hear about whether or not they found the tools useful! Remember – You can't manage what you can't measure!

*Speaker:* Mark Arney, Architectural Energy Corporation

**Session 8:** 10:00 a.m. - 11:30 a.m.

## **Union Station Tour**

*Intent:* To learn about maintaining the optimum function of installed equipment and the design choices associated with an historic restoration via a tour of Union Station.

*Description:* Come apply the earlier sessions' concepts on how to keep installed equipment working optimally. Learn ideas for improving your operation down the road and discuss design choices made by the engineers and architects at the start of this historic restoration project. Bring your walking shoes and come see Union Station complete with three new 900-ton chillers, electric heat, and a building automation system. Also discussed will be the site's history and some of the "antique" equipment. Federal energy managers and engineers shouldn't miss this tour!

*Speakers:* Mike Kemper and Glen Hibben, Union Station



## Electric Utility Deregulation

### Monday - June 4

**Session 1:** 10:30 a.m. - 12:30 p.m.

#### ***Does Mother Know Best? State Electric Utility Deregulation Plans***

*Intent:* To provide attendees with examples of typical state electric utility deregulation plans.

*Description:* State plans for electric utility deregulation will be presented. Knowing what will be decided for deregulation in your state and how it will affect building operation that directly will affect budgets is crucial to building managers. Any economic advantage may prove "priceless."

*Speakers:* Jim Ploger, Kansas State Energy Commission; Danielle Jassaud, Texas State Public Utility Commission

**Session 2:** 2:30 p.m. - 4:00 p.m.

#### ***The Defense Rests: Learn How GSA and DOD Plan for Electric Utility Purchase***

*Intent:* To provide attendees with GSA and DOD procurement and solicitation activity for electrical utility service.

*Description:* An outline of the GSA and DOD plans for kilowatt purchase, including existing agreements, possible aggregation groupings, and assessment of state deregulation plans will be presented. Panel members will discuss the pitfalls, lessons learned, and future plans for area electrical purchase by the Federal government. Ask about upcoming solicitations in your area and get the low-down on carbon credits and possible trading strategies.

*Speakers:* Ken Shutika, General Services Administration; Lindsey Lee, General Services Administration; Sharon Murphy, Defense Logistics Agency

### Tuesday - June 5

**Session 3:** 9:00 a.m. - 10:30 a.m.

#### ***Buyer Beware: The Only Negotiable Part of the Electric Bill — Generation***

*Intent:* To learn about the generation and sale of kilowatts.

*Description:* Companies will describe how their marketing plan works under electric utility deregulation in the states where they plan to sell kilowatts. What's their sales strategy? No brainer? Think again! Are you their customer in accordance with state plans that dictate how electric service will be distributed and controlled? Get your questions answered before deregulation becomes a reality. Are there any bargains? Find out if you can make a deal.

*Speakers:* Tom Arlotto, Southern Company; Marcia Garrison, Cinergy; Shelley Born, Cinergy

**Session 4:** 11:00 a.m. - 12:30 p.m.

#### ***Local Distribution Companies: Is Ma & Pa Electric Company Still Your Electric Utility?***

*Intent:* To learn what the LDCs will continue to do, do extra, and do less to get the electric power into your buildings.

*Description:* In this session, attendees are asked the question, "Is generation of electrical 'juice' the only negotiable?" Well, think again. Which utilities and what other commodities may be included in the bill? Will the savings be there? Learn what the "extra costs" are now, what they may be, and the quality of the power in the future. Can you benefit from this knowledge? If you know all the facts, you can make the right choice?

*Speakers:* Larry Conrad, Cinergy; Randy Vance, Kansas City Power & Light





**Session 5:** 2:00 p.m. - 3:30 p.m.

## ***The Middleman: Services of Energy Providers***

*Intent:* To provide attendees with the knowledge of how power brokers will work in electric utility deregulation.

*Description:* Of all the contractors you will now “dance” with to get electrical service into your building, these guys can make or break your budget with or without an agent, GSA, or DOD. Companies will describe what services they will provide consumers. Electric, along with other utilities (fuel oil, natural gas), telephone, cable, and insurance may be included in the bill. What you can do to make yourself an attractive purchaser. Learn wheeling and dealing with the “tricksters.”

*Speakers:* Bhavesh S. Patel, ASCO Power Technologies; Dave Rylaarsdam, Semptra Energy; Mark Sandoval, Nevada Power; Ted Yeats, Nevada Power

**Session 6:** 4:00 p.m. - 5:30 p.m.

## ***Golden Cows: What Facility Managers Need to do to Avoid Peak Demand Cost***

*Intent:* To present a number of energy technologies that reduce grid-connected electrical power to building loads.

*Description:* The best strategy to reduce electric consumption is to “turn off the juice.” Getting off the grid altogether may be better. Learn about reliability, the theory of “nines,” for electric service. Presenters will describe installing microturbine, solar PV and solar thermal, natural gas cooling, combined heat and power, and fuel cell technologies. Impetus of the discussion is the mind-set change of using the utility grid as back-up power versus conventional primary electrical service. In addition, presenters will discuss installing ice storage, geothermal, and alternate fuel use for electric generation.

*Speakers:* John Robbins, Solar Turbines, Inc.; Tony Occhionero, American Gas Cooling Center; Robert McCullough, McCullough Research

**Wednesday - June 6**

**Session 7:** 8:00 a.m. - 9:30 a.m.

## ***Deregulation, Load Management, and Environmental Issues***

*Intent:* To provide attendees with a broad overview of electric utility deregulation, technology, environmental issues, and load management.

*Description:* Attendees will learn about past deregulation efforts, a speculative overview of aggregation, brokering, and internet/web-based programs related to kilowatt purchase, and a general assessment of future government electrical power purchase options. In addition, total energy supply chain management and environmental concerns will be addressed for future impact on the cost of kilowatts and an example of pre-positioning of a site for deregulation.

*Speakers:* Joe Staib, Honeywell International; Joe Hahn, Johnson Controls, Inc.; Gary Hart, Southern Company

**Session 8:** 10:00 a.m. - 11:30 a.m.

## ***What You Don't Understand About Deregulation***

*Intent:* To answer your questions about electric utility deregulation

*Description:* What don't you understand about electric utility deregulation? Ask and you will find out. Questions relating to profit motive, power motive, market concepts, PUC state plans. What you learn here from a candid discussion may save your budget.

*Panelists:* Parviz Adib, Texas Public Utility Commission; Gary Hart, Southern Company; Millard Carr, Energy Management Solutions, Inc.; Bhavesh S. Patel, ASCO Power Technologies; Joe Staib, Honeywell International; Sharon Murphy, Defense Logistics Agency



## Facility Operations & Maintenance

### Monday - June 4

**Session 1:** 10:30 a.m. - 12:30 p.m.

#### ***Continuous Commissioning, Measurement and Verification***

**Intent:** To share information and the tools needed to identify performance problems prior to their occurrence using commissioning and measurement and verification.

**Description:** Performance contracts generally have lives of 10 to 15 years; however, in the federal sector, they can be much longer. During the term of the performance contract, most parties focus on whether or not expected savings are achieved, and if not, who pays. This session will address the use of the M&V system as a tool to identify potential performance problems and shortfalls prior to their occurring and how to correct deficiencies quickly. Case studies from some actual performance contracts will be presented as well as information on the International Performance Measurement and Verification Protocol (IPMVP).

**Speakers:** Marty Mozzo, M&A Associates ; TBA

**Session 2:** 2:30 p.m. - 4:00 p.m.

#### ***Building Controls***

**Intent:** To give attendees the knowledge to let the control systems in their buildings work for them.

**Description:** Should I retrofit my building control system? Hear from three perspectives, the Specifying Engineer, the Controls Manufacturer, and the End User. This session will help you decide what to control in your facilities, how to control your buildings, and what to expect when the job is finished. Learn how to control your facilities with fewer maintenance engineers. Let the control system work for you.

**Speakers:** Rob Hile, TAC Americas; Marty Applebaum, Comfort Systems; Darryl Hatley, Pacific Northwest National Laboratory .

### Tuesday - June 5

**Session 3:** 9:00 a.m. - 10:30 a.m.

#### ***Operations and Maintenance Energy Audits***

**Intent:** To learn how to use an energy audit as an efficient planning tool.

**Description:** This session reviews the importance of scoping, performing or outsourcing energy audits based on sound engineering principles. Such audits will allow facility managers to benefit from technologies and tools that optimize comfort, energy and dollar savings, reduce operations and fuel costs, lower maintenance and "downtime," and increase the safety and reliability of building systems.

**Speakers:** Gary Murray, Public Service of New Mexico; Andrew Moyad, PEPCO Energy Services

**Session 4:** 11:00 a.m. - 12:30 p.m.

#### ***Water – A Bare Necessity***

**Intent:** To learn how small changes in water conservation can make big differences.

**Description:** Water is a necessity of life. So, why are we not conserving as much as we can? Law mandates that water efficiency projects with paybacks under 10 years should be implemented. Learn what the water industry is doing today, and where they are going in the future. Hear about the water efficiency in general, "tried and true water measures," and new water efficiency products and services. See first hand the equipment that can make the difference between actual savings and calculated savings.

**Speakers:** Francis Wheeler, Water Management Inc.; Larry Kimbro, Con-Sep-T, Inc.





**Session 5:** 2:00 p.m. - 3:30 p.m.

## **GUARDing our Energy Resources**

*Intent:* To familiarize attendees on practical Army National Guard energy savings measures.

*Description:* The session will highlight sun, water, gas, Energy Conservation Investment Program (ECIP) and communicate energy measures which facility managers can incorporate into their operations. Short topics include: "Sunny Arizona," "Washing Nebraska," "De-gassing Iowa," "ECIPing Arkansas," and "Communicating within Washington State."

*Panelists:* Jeff Seaton, Arizona Army National Guard; Sam Traux, Nebraska Army National Guard; Scott Ayres, Iowa Army National Guard; Ricky Johns, Arizona Army National Guard; John Havens, Washington Army National Guard.

**Session 6:** 4:00 p.m. - 5:30 p.m.

## **Healthy Buildings**

*Intent:* To help facility managers learn how to face the special indoor air quality problems in facilities and how to handle the problems.

*Description:* Healthy Buildings? Indoor Air Quality? Building owners and managers face special indoor air quality problems in their facilities. Learn what to look for in the buildings and how having a "healthy building" can improve your energy efficiency and worker productivity. The session will highlight a case study of an unhealthy building at NOAA and what was done to correct the problem.

*Speakers:* Bernie Denno, National Oceanic and Atmospheric Administration; David Chasar, Florida Solar Energy Center

## **Wednesday - June 6**

**Session 7:** 8:00 a.m. - 9:30 a.m.

## **Maintaining Facilities**

*Intent:* To give attendees tools and ideas

about maintaining facilities and conserving energy while keeping your customers satisfied.

*Description:* Have you noticed the fine line there seems to be between energy conservation and customer service? This session will highlight energy conservation measures, while enabling you to maintain your facility at the level demanded by the customer. Learn valuable maintenance lessons from these speakers who have "Been There-Done That."

*Speakers:* Tom Ferrigan, United States Postal Service; Gary Peacock, Department of Interior

**Session 8:** 10:00 a.m. - 11:30 a.m.

## **Energy Efficiency in Federal Housing**

*Intent:* To share information about energy efficiency in federal housing.

*Description:* The Federal Government maintains housing as well as office buildings. There are numerous Agencies that maintain federal housing; the military, the State Department, the National Park Service, and the Housing and Urban Development Department. This session will show different agencies and how they work to achieve their energy goals in federal housing.

*Speakers:* Anne Beste, U.S. Navy; TBA



## Renewable Applications & Water Conservation

### Monday - June 4

**Session 1:** 10:30 a.m. - 12:30 p.m.

#### ***Photovoltaic System Design and Sizing***

*Intent:* Participants will learn how to design and size a photovoltaic system using calculations and walk-through case studies on project implementation.

*Description:* This session will teach participants the fundamentals of photovoltaic system design. Photovoltaic technology, inverter specifications and batteries will be discussed. In addition, we will take a look at grid interconnection issues and case studies of successful Federal projects and applications. After reviewing the case studies, participants will get out calculators and actually design and size a system. Bring your calculator!

*Speakers:* John Thornton, National Renewable Energy Laboratory; Byron Stafford, National Renewable Energy Laboratory

**Session 2:** 2:30 p.m. - 4:00 p.m.

#### ***Renewables and Executive Order 13123***

*Intent:* To look at various alternatives available to meet the goals set forth in the Executive Order using renewables.

*Description:* This session will review Executive Order 13123, "Greening the Government through Energy Efficiency and Management," and how renewables can help you achieve these goals. Our panelists will highlight the importance of renewables and explore the various options available beyond the obvious.

*Speakers:* Curtis Framel, Department of Energy, Seattle Regional Office; Nancy Carlisle, National Renewable Energy Laboratory; Ann Sprunt-Crawley, Department of Energy; Steve Butterworth, National Park Service

### Tuesday - June 5

**Session 3:** 9:00 a.m. - 10:30 a.m.

#### ***The Power of Wind***

*Intent:* To provide information on generating electricity using clean, renewable wind energy in a variety of applications and financing alternatives.

*Description:* The cost of wind-generated electricity has dropped dramatically since the early 1980s, and a modern utility-scale wind turbine can generate electricity for less than 4 cents per kilowatt-hour, which is competitive with fossil fuels in many locations. Presenters will review a variety of important topics to consider when evaluating the feasibility of wind projects. Topics include resource assessment, environmental considerations, economic feasibility, siting, financing, and sizing. Various funding mechanisms, including Energy Savings Performance Contracting, will be discussed along with case studies of successful projects.

*Speakers:* Ed Cannon, National Wind Technology Center; Craig Miller, U.S. Air Force Space Command

**Session 4:** 11:00 a.m. - 12:30 p.m.

#### ***Solar Savings***

*Intent:* To inform participants of the benefits and variety of solar applications.

*Description:* Solar ventilation pre-heating is an efficient way of reducing energy costs by capitalizing on the sun's energy, and the Bureau of Reclamation has done just that. The Bureau of Reclamation has completed a retrofit project – an unglazed transpired solar air collector in the Leadville Water Treatment Plant in Leadville, Colorado. Now three years after the project has been completed, the results are in. We will take a look at the expectations, realizations, and barriers that have been overcome for this successful project, which has resulted in substantial energy savings and reduced harmful emissions.

*Speaker:* Harry Remmers, Bureau of Reclamation

#### ***Flying the Solar Skies***

*Intent:* To highlight how NASA is pushing the envelope of photovoltaic and related technologies by developing high altitude, remotely-piloted research aircraft powered by the sun.

*Description:* We will review the history and future of solar-powered aircraft being developed under NASA's Environmental Research Aircraft and Sensor Technology (ERAST) project. The presentation will focus on the development of NASA's Pathfinder, Pathfinder-Plus, Centurion, and Helios aircraft. These aircraft are helping NASA achieve ever-increasing levels of performance in the quest to develop an aircraft capable of carrying a 200-pound payload for up to four months at a time at altitudes from 50,000 to 70,000 feet.

*Speaker:* Richard A. Wickman, National Aeronautics and Space Administration



**Session 5:** 2:00 p.m. - 3:30 p.m.

## **Classical Gas**

*Intent:* To examine the benefits, versatility and applications of biomass.

*Description:* Biomass is a versatile fuel that can generate electricity as well as fuel our vehicles. This session will look at the future possibilities of both. During this session, we will examine the role of biopower technologies, which convert renewable biomass fuels to heat or electricity, and the potential to expand into Federal facilities. Recent advances in the areas of co-firing, gasification, and modular systems will be discussed along with examples of where biopower technology is being used or shows promise for future application in Federal facilities. The session will also address the potential and opportunities for biomass-based alternative fuels such as ethanol to be used in fleets.

*Speakers:* Raymond Costello, Department of Energy; Ray Walt, Community Power Corporation; Ryan Walker, URS Corporation

**Session 6:** 4:00 p.m. - 5:30 p.m.

## **Geothermal Technology and Capabilities**

*Intent:* To inform participants of the benefits of geothermal technologies and applications.

*Description:* This session will examine the important role geothermal resources can play in reducing the need for fossil fuels and how Geopowering the West is working to bring clean electricity and heat to the West. Our presenters will inform participants of the benefits, feasibility and cost-effective applications through detailed case studies of successful projects. In addition, a variety of tools developed by FEMP's GHP Technology Specific Program will be presented and provide participants with the tools developed to assist in the decision making process.

*Speakers:* Doug Sattler, Energy Assets; John Shonder, Oak Ridge National Laboratory; TBA

**Wednesday - June 6**

**Session 7:** 8:00 a.m. - 9:30 a.m.

## **Water Jeopardy!**

*Intent:* To inform participants about water efficiency and conservation.

*Description:* This fun game-show atmosphere will look at water efficiency and conservation in a new way! Our panel of experts will become the contestants in this modified version of "Jeopardy" where we will test their knowledge of water conservation and efficiency while providing attendees information on this important piece of a comprehensive overall energy management plan. Topics will include water efficiency and conservation, landscape irrigation, commercial and industrial water usage. Upon conclusion of the game, we will move into a panel discussion providing more information and open the discussion to questions.

*Speakers:* Lyle Summers, Utah Department of Natural Resources; Richard Pilatzke, Fort Carson Army Base; TBA

**Session 8:** 10:00 a.m. - 11:30 a.m.

## **Innovative Applications**

*Intent:* To examine combination efforts of renewables to achieve optimal results.

*Description:* Innovative applications are cropping up around the world, and this session will present some unique approaches to providing reliable energy issues using renewable energy applications. We will look in depth at building integrated photovoltaics and hybrid systems by providing an overview of some interesting case studies that highlight the benefits of these applications.

*Speakers:* Patrina Eiffert, ImaginIt, LLC; TBA





# Sustainable Building Design

## Monday - June 4

**Session 1:** 10:30 a.m. - 12:30 p.m.

### ***Recycled Building Strategies***

**Intent:** To highlight the ideas, opportunities and challenges of “Recycled Building Methods” for both new and existing facilities, by the renovation and adaptive re-use of existing commercial facilities.

**Description:** This session will discuss the magnitude of future facilities development and escalating costs of materials due to an alarming rate of disappearing natural resources, the effective recycling of built resources – a leading-edge technology paramount to achieving meaningful sustainable architecture and environmental design. A presentation will focus on the primary differences between Recycled Building applications and construction methods in the past used to extend the life of existing buildings (remodeling, rehabilitation, reuse, and renovation).

**Speaker:** Larry Wolff, WLC Architects

**Session 2:** 2:30 p.m. - 4:00 p.m.

### ***Whole Building Design Approaches and Useful Tools for Implementing Energy Efficiency***

**Intent:** To provide an in-depth look at tools for implementing energy efficiency in federal facilities.

**Description:** This session will provide advanced level coverage of the latest tools and information on energy-efficient buildings, focus on a “whole building” approach for increasing energy efficiency and environmental performance, and implementing on-site renewable energy systems such as daylighting, solar hot water and PV systems. The latest on the “Whole Building Design Guide” (WBDG), a website “portal” to building criteria which features sustainability and its relationship to other building attributes, such as security, durability and cost-effectiveness, will be presented.

**Speakers:** Bion D. Howard, Building Environmental Science and Technology; Helen English, Sustainable Buildings Industry Council.

## Tuesday - June 5

**Session 3:** 9:00 a.m. - 10:30 a.m.

### ***Air Quality and Control Design***

**Intent:** To highlight the effectiveness of DDC and BACnet-based control systems for reducing energy consumption and energy costs while improving comfort quality of building occupants.

**Description:** This session will address a successful implementation of open protocols such as BACnet EMS systems in federal buildings, including system integration examples, energy savings, comfort control, and other related topics.

**Speaker:** Clair Jenkins, Alerton Technologies

**Session 4:** 11:00 a.m. - 12:30 p.m.

### ***Pentagon: New Ways of Doing Business in the 21<sup>st</sup> Century***

**Intent:** To provide an in-depth look at the progress of the Pentagon Renovation Project.

**Description:** Previous presentations on the Pentagon Renovation have briefly addressed techniques used to achieve positive program results. In response to requests, this session will provide additional, more detailed information on these techniques. The presentation will emphasize acquisition planning, contracting techniques, source selection, and performance specifications for this massive renovation program, the largest in US history.

**Speaker:** Walker Lee Evey, Department of Defense

### ***Confessions of a Recovering Bureaucrat***

**Intent:** To share some of the lessons learned over 35 years of working with dedicated federal professionals developing and implementing energy efficiency improvement programs.

**Description:** This session will provide a look at some of the constraints, opportunities, actions and techniques that energy managers have used to implement a successful energy resource management programs in federal facilities.

**Speaker:** Millard E. Carr, Energy Management Solutions, Inc.



**Session 5:** 2:00 p.m. - 3:30 p.m.

## **Pentagon: On Cost, On Schedule, Built for the Next 50 Years**

*Intent:* To provide essential information on energy management initiatives incorporated into the Pentagon renovation program.

*Description:* The Pentagon Renovation is the largest renovation project ever accomplished in the United States. This session will address the many innovative business practices implemented in the project to achieve its goal of "On Cost, On Schedule, Built for the Next 50 Years." These initiatives resulted in the Pentagon Renovation being selected as one of the 1999 Engineering News Record "Award of Excellence" winners. The presentation will address the many management initiatives being implemented on the program. Topics to be covered include organizational changes, acquisition planning, contracting techniques, design-build procedures, source selection, commissioning, and performance specifications for this massive renovation effort.

*Speaker:* Walker Lee Evey, Department of Defense

**Session 6:** 4:00 p.m. - 5:30 p.m.

## **Sustainable Design and Greening Issues**

*Intent:* An overview of the Department of Defense Tri-Service Approach to Sustainable Design and Development.

*Description:* This session will explore the DOD Sustainable Design Efforts in the following areas: Sustainable Design Initiatives, Sustainable Design Case Studies, Lessons Learned, Greening Charrettes, Sustainability Reports, and Green Bases of the Future, Green Assessment Tools: a) Leadership in Energy & Environmental Design Green Building Rating System, and b) Sustainable Installations Rating Tool.

*Speakers:* Tony Hinson, Naval Facility Engineering Command; Gail Lindsey, Design Harmony, Inc.

**Wednesday - June 6**

**Session 7:** 8:00 a.m. - 9:30 a.m.

## **Sustainable Design and Renewable Energy Projects for Small Facilities**

*Intent:* To provide an update on several sustainable design and renewable energy projects at Assateague Island National Seashore.

*Description:* This session will include a presentation on several projects currently underway at Assateague Island National Seashore, a unit of the National Park Service on the Atlantic coast of Maryland. The facilities that will be discussed include mobile bathhouses featuring solar water pumping and sustainable design strategies, a renewable energy retrofit to a backcountry lodge, and solar hot water installations at several campground shower facilities. The National Park Service has a Memorandum of Understanding with the Department of Energy which is intended to help the park units to showcase its projects and educate visitors about energy efficiency and renewable energy. These projects represent several of those efforts that exemplify this endeavor.

*Speaker:* Chris Finlay, National Park Service

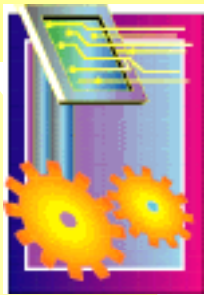
**Session 8:** 10:00 a.m. - 11:30 a.m.

## **Evaluating Power Quality Problems in Existing Facilities**

*Intent:* To provide an understanding of power quality problems related to grounding, transients, harmonics, and voltage sags when "new" equipment is added to "old" facilities. A practical guide to energy and power monitoring technologies and strategies will be presented.

*Description:* This session includes a demonstration of cause and effect of voltage sags, interruptions, and flicker followed by an overview of typical power quality symptoms and problems. The wrap up includes a summary of technology trends and new power quality solutions to improve equipment uptime and reliability. This session will equip facility managers with a range of energy and power monitoring options that can be quickly installed, easily maintained, and which can produce immediate savings.

*Speakers:* Dan Carnovale, Cutler-Hammer; Paul Stack, Johnson Controls, Inc.; Mark Wagner, Johnson Controls, Inc.



## Technology

### Monday - June 4

**Session 1:** 10:30 a.m. - 12:30 p.m.

#### ***Combined Cooling, Heat and Power***

*Intent:* To highlight the economic, environmental and fossil fuel efficiency advantages of combining the production of energy for heating, cooling and electricity from one technology system.

*Description:* Combined cooling, heat and power cogeneration systems reduce overall energy costs, increase energy efficiency, and reduce emissions. In this session, a panel will discuss the technologies and cost-effective applications of these systems in Federal and private-sector facilities.

*Panelists:* Joel Anderson, Mississippi Valley Gas; Patti Garland, Oak Ridge National Laboratory; Jim Peedin, Honeywell

**Session 2:** 2:30 p.m. - 4:00 p.m.

#### ***Greening Federal Fleets***

*Intent:* To present an overview of the cost and performance of alternative fueled vehicles and to describe strategies for expanding green federal fleets.

*Description:* An increasing array of alternative fueled vehicles (AFV) are on the market. This session will present an overview of the cost and performance of these technology options. In addition, it will highlight successful experiences with creating and expanding AFV fleets.

*Speakers:* Dennis Smith, Department of Energy; William Anglely, United States Postal Service

### Tuesday - June 5

**Session 3:** 9:00 a.m. - 10:30 a.m.

#### ***Lighting***

*Intent:* To provide an overview of state-of-the-art lighting technologies and lighting control options, and to summarize what's known about the impact of lighting quality on productivity.

*Description:* To describe one or two examples of cost-effective lighting technologies (e.g., lighting distribution and task lighting solutions), to provide an overview of state-of-the-art lighting control options, and to summarize what's known about the impact of lighting quality on productivity.

*Speakers:* Carol Jones, Pacific Northwest National Laboratory; Damon Wood, Ledalite Energy Technologies Group; Mike Siminovich, Lawrence Berkeley National Laboratory

**Session 4:** 11:00 a.m. - 12:30 p.m.

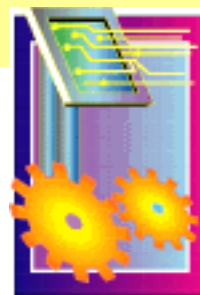
#### ***Controls to Reduce Energy Costs and Improve Power Quality***

*Intent:* To highlight effective technologies for controlling energy consumption and reducing energy costs.

*Description:* How will building automation in the next decade be different from the last? Predicting the future is risky, but there are two predictions that are a safe bet. First, the Web will play a vital role in building automation. Second, open standards will continue to evolve, and a profusion of new technology continues to develop around the Web, built primarily around open standards. This panel discussion will discuss the status of protocols such as BACnet and LonTalk, and how they will relate to the use of the Web for building automation.

*Speakers:* Gerry Hull, Automated Logic Corp.; Jay S. Bayne, Johnson Controls, Inc.





**Session 5:** 2:00 p.m. - 3:30 p.m.

## ***Walking on Air - Energy Efficient, Flexible and Adaptive HVAC Distribution Systems***

*Intent:* To present the state of knowledge, engineering diversity, and performance of recent developments in flexible and adaptive distribution systems in office buildings.

*Description:* Energy efficient office buildings must be easily reconfigurable, including their mechanical and electrical infrastructures, to maintain maximum occupant productivity in an increasingly competitive global market for office space. There have been several innovations in engineering practice toward delivering flexible, user-based services for air quality, thermal comfort, lighting comfort and network access, predominantly using raised floors, to move beyond “embedded” technologies in buildings to end-user technologies.

*Speakers:* Bassam F. Bohsali, Smith Group; Douglas Mass, Cosentini Associates; Charles Buscarino, Cosentini Information Technologies

**Session 6:** 4:00 p.m. - 5:30 p.m.

## ***Hot Project Showcases***

*Intent:* To highlight innovative projects that display one or more technologies presented in this Conference.

*Description:* Where have these technologies been applied successfully? And what are the factors that led to that success? This session will present several good examples and discuss the necessary ingredients to break through barriers to innovation.

*Speakers:* John Allshouse, National Archives and Records Administration; Carol Ross Barney, Ross Barney + Jankowski Architects; Phil Newcomb, Reliant Energy Solutions

**Wednesday - June 6**

**Session 7:** 8:00 a.m. - 9:30 a.m.

## ***What's New in Fuel Cells***

*Intent:* To provide an update on fuel cell technologies and the impact fuel cells may have on the energy market.

*Description:* This session begins with a presentation of a vision for a future “hydrogen economy” followed by a presentation on commercially-available fuel cell technology. Topics will include descriptions, efficiency, environmental impacts, and a discussion of what will become available in the next years.

*Speakers:* Greg Frankhauser, International Fuel Cells Corp.; David Block, Florida Solar Energy Center

**Session 8:** 10:00 a.m. - 11:30 a.m.

## ***Future Energy Technologies***

*Intent:* To introduce the audience to novel and emerging building technologies.

*Description:* This session will showcase an array of novel and emerging technologies that could transform the way energy is produced and used in buildings, with a “crystal ball” glimpse at emerging and futuristic energy efficient and renewable energy technologies, along with several scenarios for a clean energy future.

*Speakers:* Mark Ginsberg, Department of Energy; Skip Laitner, Environmental Protection Agency; Marilyn Brown, Oak Ridge National Laboratory.



# Project Financing

## Monday - June 4

**Session 1:** 10:30 a.m. - 12:30 p.m.

### ***Alternative Financing for Contracting Officers***

**Intent:** To assist contracting officers (COs) and their project team members who are new to alternatively-financed energy projects by providing them with advice from CO and procurement attorney experts.

**Description:** Contracting officers and procurement attorneys who have implemented multiple alternatively-financed energy projects with ESPC and utility-financing mechanisms will share their experiences at an advanced level. Attendees will learn what's needed to put together an alternatively-financed project, understand how it really works, and hear success stories. Coverage will include an explanation of statutory authorities, discussion of procurement issues and applicable FAR clauses, as well as how these projects differ from other procurements. This session is being held jointly with the Acquisition track.

**Speakers:** Priscilla Sullivan, National Center for Toxicology Research; David Crouch, Department of the Navy; Patricia Walters, Department of Energy; Robert Kittel, Department of the Army

**Session 2:** 2:30 p.m. - 4:00 p.m.

### ***Tools for Confident Decision-Making in Alternately-Financed Projects***

**Intent:** To present attendees with tools to help them make confident decisions throughout the implementation of an alternatively-financed energy project.

**Description:** Expert project facilitators and proposal analyzers with experience on numerous federal energy projects will go 'in-depth' on the following key topics in project implementation:

- Proposal evaluation - Where do you start? What are the "got-chas"? How do you find the forest for the trees?
- Practical approach to modeling project financial assumptions
- Benchmarking and practical measurement and verification – letting the proposal evaluation and key energy conservation measures guide your M&V efforts

**Speakers:** Terry Sharp, Oak Ridge National Laboratory; Tim Kehrli, TLK Consulting; Erick Lupson, National Aeronautics and Space Administration

## Tuesday - June 5

**Session 3:** 9:00 a.m. - 10:30 a.m.

### ***Best Practices on Utility-Financed Projects***

**Intent:** To provide intermediate or advanced "news you can use" and information on challenging issues for energy managers, facility managers, contracting officials, and others involved with utility-financed energy projects.

**Description:** A brief introductory presentation will launch the attendees and expert panelists into an intermediate and advanced-level question-and-answer discussion on getting the most from your utility-financed project – solutions to lessons learned, best practices, etc. The panel will work prior to the conference to prepare a listing of appropriate "tough questions" to stimulate discussion. Questions will also be taken from the audience. An e-mail hotlink, available from the Energy 2001 website, gives you the opportunity to ask a utility financing question you've always wanted to know, but were afraid to ask. The panelists will use your inquiries to fuel session discussions.

**Panelists:** Laurie A. Cordell, U.S. Navy; Jim Snook, U.S. Air Force; Steve Allenby, Catalyst Financial Group; Mary Colvin, National Renewable Energy Laboratory

**Session 4:** 11:00 a.m. - 12:30 p.m.

### ***Best Practices on ESPC Projects***

**Intent:** To provide intermediate or advanced "news you can use" and information on challenging issues for energy managers, facility managers, contracting officials, and others involved with privately-financed energy projects.

**Description:** A brief introductory presentation will launch the attendees and expert panelists into an intermediate and advanced-level question-and-answer discussion on getting the most from your energy savings performance contract (ESPC) project – solutions to lessons learned, best practices, etc. The panel will work prior to the conference to prepare a listing of appropriate "tough questions" to stimulate discussion. Questions will also be taken from the audience. An e-mail hotlink, available from the Energy 2001 website, gives you the opportunity to ask an ESPC question you've always wanted to know, but were afraid to ask. The panelists will use your inquiries to fuel session discussions.

**Panelists:** Scott Conner, Denver Regional Federal Center; Michael Beccaria, ERI Services Inc., Phil Voss, National Renewable Energy Laboratory; Carol T. Sargent, Army Corps of Engineers; Doug Dahle, National Renewable Energy Laboratory



## Wednesday – June 6

**Session 7:** 8:00 a.m. – 9:30 a.m.

### ***Alternative Financing through Rural Electric Cooperatives, Public Power Utilities, and Natural Gas LDCs***

*Intent:* To introduce the option to finance federal energy projects through rural electric cooperatives (RECs), public power utilities, and natural gas local distribution companies (LDCs).

*Description:* Rural electric cooperatives, public power utilities, and natural gas local distribution companies operating right in the “backyard” of federal agencies across the country offer the potential for federal agencies implementing energy projects. This session will provide background on rural electric cooperatives, public power utilities, and natural gas LDCs, highlight the opportunity federal agencies have to finance their energy efficiency projects through these organizations, look in detail at the pros and cons of such arrangements and share some success stories.

*Speakers:* Vince Heuser, Nolin Rural Electric Cooperative; Jim Vallort, Nicor; Patricia Quinn-McGovern, Omaha Public Power District

**Session 8:** 10:00 a.m. - 11:30 a.m.

### ***Down the Road with an Alternately – Financed Project***

*Intent:* To provide a 360-degree look at a long-completed alternatively-financed federal energy project.

*Description:* What can you expect down the road after your ESPC project has been commissioned? These panelists each played key roles in implementing the National Animal Disease Center project. By Energy 2001, most of the energy conservation measures will have been in place for one year past commissioning. A cogeneration system at the facility will have been in place for over six months. Now they’ve been living with their decisions. You’ll be in their shoes soon — wouldn’t you like to know what they think? Panelists will share candid comments as they look back on this established project. What’s it like to live with it now? What would they have done differently? What worked? What didn’t work?

*Panelists:* Dennis Jones, Department of Agriculture; Sandra Postell, Department of Agriculture; Steve Dunnivant, EMP2, Inc.; Jerry Cook, Johnson Controls, Inc.; James M. Prince, Johnson Controls, Inc.; John Ziegenbusch, Alliant Energy

**Session 5:** 2:00 p.m. – 3:30 p.m.

### ***Number Crunching – BYOL (Bring Your Own Laptop)***

*Intent:* To familiarize attendees with how private-sector financing for federal energy projects works, with particular attention paid to interest rate determination.

*Description:* Attendees will walk away from this session with answers to the following: How are interest rates determined on federal projects? How are interest rate structuring, components of interest cost and financial models used to determine costs? What do I need to do to get the best interest rate? How do I know I’m receiving the best rate possible for my project? What kinds of rates are federal energy projects receiving? The attendees will be given a spreadsheet concerning sample federal energy projects in advance of the session – via the Energy 2001 web site and diskette/CD handed out at the session. The session leaders will work through the project examples with the attendees engaged in hands-on participation on their laptops. The material will also be available on a projection screen for attendees without a laptop.

*Speakers:* Bruce Gross, GE Capital; Anita Morino, Bostonia Partners LLC; Bob Brozey, ABB Energy Capital

**Session 6:** 4:00 p.m. - 5:30 p.m.

### ***The Fine Print – Agency Policies and Contract Issues Related to Alternately-Financed Projects***

*Intent:* Participants will learn the in’s and out’s of agency policies and procedures, contractual issues and other sticky points on what’s needed to get alternately-financed federal energy projects in place.

*Description:* In agency-specific break-out groups, attendees will participate in facilitated discussions and Q&A time covering the agency policies and contractual issues in both ESPC and Utility-financed projects necessary to make an award, including concerns about specific contract clauses such as buy down/buy out, bundling, etc. Break-out groups will be led by agency representatives who are responsible for setting policy on alternative financing of energy projects for their agency.

*Break-Out Session Leaders:* Tatiana Muessel, Department of Energy; Regina Larrabee, Department of the Army; Karen Curran, General Services Administration; Jeff White, Veterans Affairs





## Acquisition

### Monday - June 4

**Session 1:** 10:30 a.m. - 12:30 p.m.

#### ***Alternative Financing for Contracting Officers***

**Intent:** To assist contracting officers (COs) and their project team members who are new to alternatively-financed energy projects by providing them with advice from CO and procurement attorney experts.

**Description:** Contracting officers and procurement attorneys who have implemented multiple alternatively-financed energy projects with ESPC and utility-financing mechanisms will share their experiences at an advanced level. Attendees will learn what's needed to put together an alternatively-financed project, understand how it really works, and hear success stories. Coverage will include an explanation of statutory authorities, discussion of procurement issues and applicable FAR clauses, as well as how these projects differ from other procurements. This session is being held jointly with the Project Financing Track.

**Speakers:** Priscilla Sullivan, National Center for Toxicology Research; David Crouch, Department of the Navy; Patricia Walters, Department of Energy; Robert Kittel, Department of the Army.

**Session 2:** 2:30 p.m. - 4:00 p.m.

#### ***DOD Utility Privatization***

**Intent:** To assist contracting officers and program personnel in understanding and pursuing transactions related to utility privatization.

**Description:** The DOD is transferring the operation, maintenance and ownership of its on-base utility systems (electric, gas, water and wastewater). Learn how these transactions are structured, competed and financed from presentations by DOD program personnel who have participated or are participating in the execution of them. An examination of the acquisition elements of the transactions, to include a discussion of contract requirements, will be emphasized. How privatization of the infrastructure impacts commodity purchases will also be examined and discussed.

**Panelists:** Alberto Armesto, U.S. Air Force; Satish Sharma, U.S. Army; W.F. Taylor, U.S. Navy; Jacob Moser, Defense Energy Support Center

### Tuesday - June 5

**Session 3:** 9:00 a.m. - 10:30 a.m.

#### ***"Green" Procurement: Why and How***

**Intent:** To educate and inform interested acquisition and requirements personnel in successful green and energy-efficient product purchasing methods.

**Description:** Contract specialists and contracting officers particularly, but also federal requirements personnel, are often neither clear on the legislative requirements for buying "green" nor aware of the resources and procurement methods available to comply with the requirements. This session will provide an overview of legislation and agency-wide policy guidance on the requirements for buying energy efficient and environmentally friendly products and services. Emphasis will be on how and where to buy the items best suited to fulfill requirements, suggested resources and sources of supply, and successful acquisition methods.

**Speakers:** Linda Moseros, White House Task Force on Waste Prevention and Recycling; Heather Davies, Department of the Interior.

**Session 4:** 11:00 a.m. - 12:30 p.m.

#### ***Energy-Related Products and Services Available on GSA Schedules***

**Intent:** To assist both federal contracting personnel and customers and vendors in understanding and using GSA schedules to acquire energy-related supplies and services.

**Description:** Agency personnel needing and wishing to acquire energy-related products and services often have difficulty finding them in the GSA schedules. This session will provide an overview of the GSA schedule program itself, as well as provide specific information on purchasing energy services, Energy Star products and other energy efficient products currently available on GSA schedules.

**Speakers:** Alan Searsy, General Services Administration; Larry Schmoll, General Services Administration, Ed Johnson, General Services Administration



## Tuesday June 5

**Session 1:** 2:00 p.m. – 3:30 p.m.

### ***The Laboratories for the 21st Century Partnership Program***

*Intent:* To introduce participants to the Laboratories for the 21st Century Partnership Program, how to join, and what resources are available.

*Description:* This session will highlight the unique aspects of energy consumption in laboratories and introduce efficiency solutions. Resources available to partners in the Labs for the 21st Century program will be presented including performance benchmarking and rating, a recognition program, and the Labs 21 Tool Kit. A Labs 21 partner will describe his experience with the program and lead a discussion on how labs can benefit from the partnership.

*Panelists:* Frank Kutlak, National Institutes of Health; Phil Wirdzek, Environmental Protection Agency; Robb Gries, National Oceanic and Atmospheric Administration

**Session 2:** 4:00 p.m. – 5:30 p.m.

### ***High Performance Laboratory Design***

*Intent:* To introduce high performance design of laboratories and distribute an electronic design guide to participants.

*Description:* Free software containing the Design Guide for Energy Efficient Labs will be distributed (bring your laptops). An overview of laboratory design issues and use of the Design Guide will be presented, followed by a facilitated discussion of hot topics (topics to be selected by attendees may include: HVAC, fume hoods, controls, commissioning, minimum air changes, and codes vs. standards). This session is for participants familiar with laboratory design issues.

*Speaker:* Geoffrey Bell, Lawrence Berkeley National Laboratory

## Wednesday, June 6

**Session 3:** 8:00 a.m. – 9:30 a.m.

### ***Federal Industrial Facilities Initiative***

*Intent:* To introduce FEMP's industrial facilities initiative and describe resources available to improve industrial energy efficiency.

*Description:* Presentations will describe FEMP's industrial program and how to tap the resources of DOE's Office of Industrial Technologies (OIT). Included will be descriptions of best practice assessments of Federal industrial facilities as well as Industrial Assessment Center (IAC) assessments for Federal industrial/energy intensive facilities.

*Panelists:* Mitch Olszewski, Oak Ridge National Laboratory; Bill Clark, University City Science Center

**Session 4:** 10:00 a.m. – 11:30 a.m.

### ***Laboratory Facility Case Studies***

*Intent:* To share opportunities and lessons learned in case studies of laboratory facilities.

*Description:* Three case studies will be presented. The first presentation will be on a comprehensive energy management program at the Lawrence Berkeley National Laboratory that reduced energy costs 60 percent, saving \$6 million/year. The second presentation will describe a newly constructed Federal laboratory. The third presentation will present a comprehensive retrofit of the Ann Arbor EPA lab using alternative financing (an energy savings performance contract).

*Speakers:* Dale Sartor, Lawrence Berkeley National Laboratory; James Carpenter, Environmental Protection Agency

## Optional Pre-Workshop Programs

### Pre-Workshop ASHRAE Course

## “Design of Commercial Ground-Source Heat Pumps”

**Sunday, June 3**

**1 p.m. – 5 p.m.**

This course will provide a detailed overview of the design issues relevant to commercial and institutional ground-source heat pump systems, including ground-coupled systems and ground water source systems. Students will learn about the different types of systems and their advantages and disadvantages, as well as building loads, zoning and equipment selection. Attendees will also learn about site characterization, heat exchangers, piping, pumping, water-related issues, ventilation air requirements, cost containment, and hybrid ground-coupled heat pumps.

**Instructors:** Kevin Rafferty, P.E., is senior mechanical engineer at the Geo-Heat Center, Oregon Institute of Technology. Active in ASHRAE, he is the vice-chairman of Technical Committee 6.8 Geothermal Energy Utilization and a member of TC 6.2 District Energy. Rafferty is the co-author of the ASHRAE publication, *Ground-Source Heat Pumps – Design of Geothermal Systems for Commercial and Institutional Buildings*.

Robert Dooley, P.E., is president of his consulting firm, RJ Dooley & Associates. Dooley started designing geothermal heat

pump systems in 1985. During 1999, his firm designed or assisted in the design of 9,450 tons of geothermal heat pumps, representing 5.2 million square feet of building space. He is also a technical consultant under contract to the Geothermal Heat Pump Consortium, U.S. Department of Energy and U.S. State Department.

John A. Shonder is a senior mechanical engineer with the U.S. Department of Energy's Oak Ridge National Laboratory in Oak Ridge, TN. He is research-chairman of ASHRAE TC 6.8 Geothermal Energy Utilization and also a member the Federal Energy Management Program's (DOE FEMP's) Geothermal Heat Pump Core Team; which provides financing, design, and technical assistance to federal agencies currently implementing over 15,000 tons of GHP projects.

**Fee:** \$95 for ASHRAE members; \$110 for non-members.  
Continuing Education Credit: 4 PDHs.

Register for this course at the ASHRAE website [www.ashrae.org](http://www.ashrae.org) or through ASHRAE's Customer Service Department at 800-527-4723.

### Pre-Workshop Training Program

## “How to Do Business with the Federal Government”

**Sunday, June 3**

**3 p.m. – 5 p.m.**

This no-cost program will teach manufacturers and vendors how to sell their products and services to the Federal government.

The workshop will highlight three of the primary routes to selling products and services to the federal government: through two federal supply agencies, through utilities and ESCOs, and through direct sales to agencies. You will hear vendors discuss their success in selling their products and services to federal customers – what's worked and what hasn't. Each panelist will give a 10–15 minute presentation. The workshop will conclude with a 30-minute question-and-answer session.

**Moderator:** Phil Coleman, Lawrence Berkeley National Laboratory

**Fee:** No charge

No advance registration needed. Just come to the Exhibit Hall at 3 p.m.

### Panelists:

<b>Federal Supply Agencies</b>	General Services Administration	Pat Geisinger
	Defense Logistics Agency	David Lipshutz
<b>Utilities</b>	Southern California Edison	Bill Bryan
<b>Energy Service Company</b>	SEMPRA	Dave Rylaarsdam
<b>Agency</b>	DOE	Alison Thomas
<b>Vendors</b>	Waterless	Bill Slaughter
	TRANE	Dave Molin



## Optional Post-Workshop Programs

### Post-Workshop AEE Training Opportunity

#### “Skills Update for Trained Energy Managers”

**Thursday, June 7 – Friday, June 8**

*9 a.m. - 5 p.m.*

Following Energy 2001, the Association of Energy Engineers (AEE) will present a new and updated two-day training program June 7-8 at the Hyatt Regency Crown Center.

The AEE Skills Update 2001 for Trained Energy Managers seminar has been completely updated and revised from its previous offerings. This program is a brand-new seminar and is a follow-up to the very popular Comprehensive Five-Day Training Program for Energy Managers that AEE has offered for the last six years and contains completely new material. Dr. Wayne Turner and Steven Parker will present information on a number of advanced topics that are not fully covered in basic seminars.

The Skills Update 2001 for Trained Energy Managers seminar will include expanded coverage and new topics such as water

management, combined heat and power, distributive generation, microturbines and fuel cells, geothermal heat pumps, and metering submetering, and monitoring.

*Instructors:* Wayne C. Turner, Ph.D., P.E., C.E.M., Oklahoma State University, and Steven Parker, P.E., C.E.M., Pacific Northwest National Laboratory.

*Fee:* \$885 for government, nonprofit and AEE members. \$985 for non-members.

To register, call Valerie Oviatt, AEE, at 770-925-9633. For more information on this program, contact Ruth Marie, AEE, at 770-447-5083, x210.



### Post-Workshop Training Opportunity

#### “Laboratories for the 21st Century: High Performance Low-Energy Design Course”

**Thursday, June 7**

*8 a.m. - 5 p.m.*

*(Meet in Hyatt lobby promptly at 8 a.m.)*

This one-day course, presented by the DOE and EPA Laboratories for the 21st Century Program, will provide a comprehensive understanding of the opportunities to optimize energy performance in new and existing laboratories. The course will be taught by seasoned laboratory designers, energy managers, and facilities professionals.

*Course topics will include:* The Architecture of High Performance Labs, The Energy Efficient Design Process, Air Supply and Distribution Systems, Laboratory Exhaust Systems, Direct Digital Controls, Commissioning, Lighting, Case Studies, Resources and Tools.

As a special bonus, participants will be able to review a revolutionary new laboratory hood technology. This technology, developed at the Lawrence Berkeley National Lab, reduces airflow requirements by 50% or more in laboratory hoods using a push/pull air divider approach.

An electronic *Energy Efficient Laboratory Design Guide* will serve as the reference guide for the course. Software will be distributed at the course or it can be downloaded from:

<http://ateam.lbl.gov/Design-Guide/index.html>.

Participants are encouraged to bring their laptops and load the software.

The course will be limited to 36 attendees to assure good interaction. Participants are expected to have some understanding of laboratory design issues.

*Instructors:* Donald Prowler, FAIA, Princeton University; Geoffrey Bell, P.E., Lawrence Berkeley National Lab; Otto VanGeet, P.E., National Renewable Energy Lab; Dale Sartor, P.E., Lawrence Berkeley National Lab, and Frank Kutlak, R.A., National Institute of Health.

*Fee:* \$95. Includes round-trip bus transportation between the Hyatt and the course location, refreshments, lunch, course workbook, and CD software including the *Energy Efficient Laboratory Design Guide*.

For registration details, contact Bob Housh at 816-531-7283, or e-mail [Labs21@toto.net](mailto:Labs21@toto.net).

For more information about the Laboratories for the 21st Century Program, visit: <http://www.epa.gov/labs21century>.

## General Information

### Hotel Information:

Blocks of rooms have been reserved at the Hyatt Regency Crown Center and The Westin Crown Center. Please make your reservations directly with the hotels as soon as possible to guarantee room availability. Tell the hotel you qualify for these rates by asking for the Energy 2001 group rate. The special rates apply three days before and three days after the workshop/exposition as well. *Please be sure to reserve your room early. Space is limited! Rooms may be available after May 18th, but the low rates cannot be guaranteed after that date.*

#### Hyatt Regency Crown Center

2345 McGee Street  
Kansas City, Missouri 64108  
Telephone: 816-421-1234 Fax: 816-435-4190

*Reservations:* Tell them you will be attending Energy 2001. The government rate will be available until May 18th.

*Note:* All workshop sessions and the trade show will be held in the Hyatt.

#### The Westin Crown Center

1 Pershing Road  
Kansas City, Missouri 64108  
Telephone: 816-474-4400 Fax: 816-391-4438

*Reservations:* Tell them you are with the "Department of Energy" room block. The government rate will be available until May 18.

*Note:* The Westin is located just minutes from the Hyatt in the Crown Center complex. The hotels are connected by The Link, an enclosed walkway.

## There are three easy ways to register:

1. Help us save paper. Use the Secure Web Site for online credit card registration: [www.energy2001.ee.doe.gov](http://www.energy2001.ee.doe.gov)
2. Fax the registration form on page 31 to 321-638-1010. Include credit card or other payment information on the form.
3. Complete the registration form on page 31 and mail it with your payment to:

Energy2001 Workshop & Exposition  
c/o Florida Solar Energy Center  
1679 Clearlake Road, Cocoa, FL 32922-5703

If you have any questions or need additional information, please contact JoAnn Stirling at 800-395-8574 or e-mail [joann@fsec.ucf.edu](mailto:joann@fsec.ucf.edu).

Please allow two to three weeks for processing and acknowledgement of payment. Keep this brochure for future reference, and check the conference web site [www.energy2001.ee.doe.gov](http://www.energy2001.ee.doe.gov) for program changes and updates. *All information and payment details must be included in order to process your registration.*

#### Registration Deadlines:

Registrations must be postmarked by March 31 to qualify for the "Early Bird" or Team Discount rates.

*Please do not mail, e-mail or fax registrations or register online after May 25. Bring all registrations after that date with you to the workshop site.*

### Who should attend?

If your work involves planning, coordinating or implementing energy efficiency, renewable energy or water efficiency programs, then you'll want to come to Energy 2001. Experts in these fields will share strategies, success stories and tips to help you learn what works and what doesn't. Check out our website for information on the people who have attended previous workshops: [www.energy2001.ee.doe.gov](http://www.energy2001.ee.doe.gov).

### Want to get mailings by e-mail instead?

If you'd like to receive information on future energy workshops by e-mail, please send your e-mail address and current mailing information to [joann@fsec.ucf.edu](mailto:joann@fsec.ucf.edu) and we'll move you to our e-mail distribution list.

### Airport Transportation:

The Hyatt Regency is located 22 miles from Kansas City International Airport – a drive of about 35 to 40 minutes.

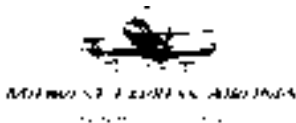
Taxi service is provided by Yellow Cab, Terminal Cab and K.C. Carriage. The current price for service from the airport to the Hyatt is \$24. Call 816-471-5000 for more information. The easiest way to get from the airport to the hotel is via KCI Shuttle (816-243-5000). Shuttles depart from the airport at 25 and 55 minutes past each hour from 5:55 a.m. until 11:55 p.m., seven days a week. Current round-trip from the airport to the Hyatt or Westin is \$21 per person. All advance registrants will be sent a one dollar discount “Shuttle Buck” with their Energy 2001 confirmation letter. After you get your luggage at the airport, just stop by one of the Shuttle ticket counters to buy your ticket.

Rental cars are also available at the airport. If you're driving to the Hyatt from the airport, take I-29 south to the 169 South, Kansas City exit. Follow 169 south over the river, continue straight on Broadway. Go left on 20th Street, then right on McGee to the Hyatt entrance.

### Air Travel Discounts:

With few exceptions, Federal employees are required to use the GSA City Pair program. For additional information, see [www.fss.gsa.gov/citypairs](http://www.fss.gsa.gov/citypairs). Note that the discounted rates described below are not available to the general public, so Federal employees may not use the lower fare exception from the GSA City Pair contracts.

Non-Federal employees traveling to the workshop are eligible to receive special discounted airfares from three “Energy 2001 Official Airlines:”



Midwest Express Airlines offers nonstop service from nine U.S. airports: Boston, Des Moines, Milwaukee, New York (LaGuardia), Omaha, San Antonio, San Francisco (beginning this spring) and Wash-

ington, D.C. (Dulles and National). Contact your travel agent or Midwest Express (800-452-2022) for information on discount rates and schedules. Midwest Express will give a 6% discount off any published fare and a 10% discount if purchased at least 60 days in advance. They are also offering discounts at National Car Rental. Mention Convention File Number CMZ1018 when contacting them.

All World Travel has arranged discounts with both Delta and American Airlines of 5% off any published fare and 10% if purchased at least 60 days in advance. Low zone fares from a number of U.S. cities have also been set up. Special rental car discount rates with Avis are also available. Contact All World at 321-783-5393 for more information.

### Train Transportation:

Amtrak connections are located next to Union Station at 2200 Main Street, just two blocks from the Hyatt. You can get Amtrak rate and schedule information at 800-872-7245.

### What to Wear:

Business casual attire is suggested for all workshop functions.

### Special Needs:

Please be sure to indicate any special needs (e.g., vegetarian meals) on the registration form. We will attempt to honor all special requests.

### Weather:

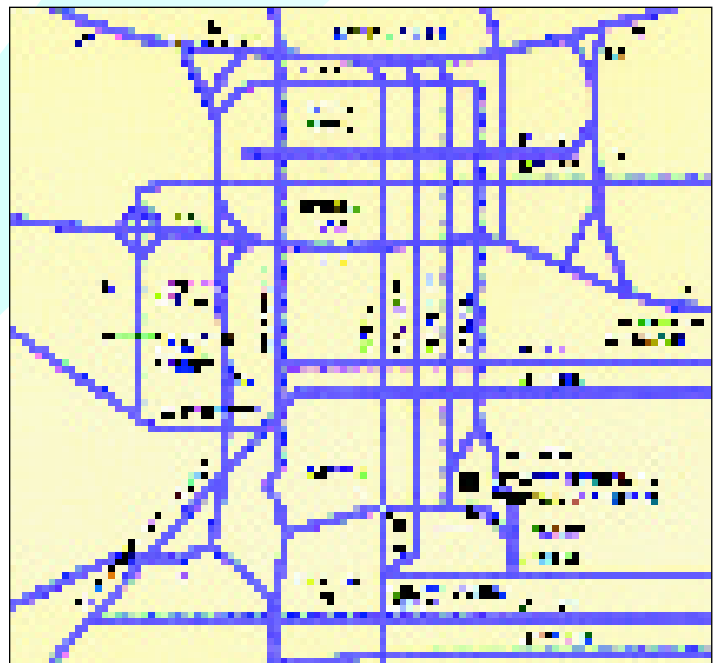
Average temperatures in June in Kansas City are around 74 °F, ranging from an average high of 84° to a low of 65°.

### Taping of Sessions:

No audiotaping or videotaping is permitted at any workshop function.

### Updated Information:

Program changes, updates and additions will be posted on the workshop web site on a regular basis. Check out [www.energy2001.ee.doe.gov](http://www.energy2001.ee.doe.gov).



### General Information:

For general information on Energy 2001, call toll-free 800-395-8574, or e-mail [joann@fsec.ucf.edu](mailto:joann@fsec.ucf.edu).



# The Energy 2001 Trade Show

One of the highlights of Energy 2001 will be the Trade Show. Attendees will learn about the latest energy-saving products and services. If you'd like to exhibit at Energy 2001, contact Exhibit Promotions Plus at 410-997-0763, or e-mail [energy@epponline.com](mailto:energy@epponline.com).

## Current/Prior Exhibitors:

2RW Consulting Engineers, PC  
A & K Energy Conservation, Inc.  
Abacus Engineered Systems  
Advance Transformer Co.  
Alerton Technologies, Inc  
Andersen Windows  
Armstrong Service Inc.  
Association of Energy Engineers  
AstroPower, Inc.  
Atlantic Solar Products, Inc.  
Avista Advantage  
Bacharach, Inc.  
Bayer Corporation  
Bayview Technology Group  
CFC REFIMAX LLC  
Comfort Foam  
ConEdison Solutions  
Constellation Energy Source  
Controlled Energy Corp  
CPFilms, Inc.

Cutler-Hammer  
Datapult  
Defense Supply Center Philadelphia  
Defense Energy Support Center  
Destination Conservation Ltd  
Dynamic Energy Concepts, Inc.  
Earth Protection Services, Inc.  
Edmpro.com  
E-Mon Corporation  
Energy Assets  
Energy Masters International, Inc.  
Energy Systems Group LLC  
Energy User News  
EnLink Geoenergy Services Inc.  
Facilities Service Group  
Federal Energy Management Program,  
U.S. Dept. of Energy  
FEMP's Federal Procurement Challenge  
FirstEnergy  
GE Lighting  
Geothermal Heat Pump Consortium  
GSA Energy Center of Expertise  
GSA, FSS, General Products Center  
GSA, Management Services Center  
Heat Pipe Technology, Inc.  
HEC Energy and Design Services  
Honeywell International  
Howard Industries, Inc.  
Hudson Technologies Company  
Intirion/Microfridge  
Johnson Controls, Inc.  
KMC Controls  
Ledalite Architectural Products  
Leviton Manufacturing Co.  
Lightstat, Inc.  
MaGrann Associates  
MOLETEC Corporation  
Monitor Products, Inc.  
MSC Specialty Films, Inc.  
Nailor Industries Inc.  
National Lighting M.S.C.  
NORESCO, An Equitable Resources Co.  
Northwest Energy Education Institute

Oak Ridge National Laboratory  
Olympus America Inc.  
Pacific Northwest National Laboratory  
Pacific Science & Technology, Inc.  
Panasonic Lighting  
Pennsylvania Department of  
Environmental Protection  
Philips Lighting Company  
Power Correction Systems/Trinity  
PowerPod Corporation  
Radiant Optics, Inc.  
Reliant Energy Solutions, Inc.  
Renova Technologies, LLC  
Retro Tech Systems Inc.  
RoofMart International, Inc.  
SAIC  
Sebesta Blomberg  
Sempra Energy Services  
Siemens Solar  
Silicon Energy  
Solar Outdoor Lighting, Inc.  
Solar Turbines Incorporated  
Solid State Heating Corp. (SSHC, Inc.)  
Southern Company Energy Solutions  
Square D/Schneider Electric  
Strategic Resource Solutions  
Systems Corporation  
TAC Americas  
Therm-O-Lite, Inc.  
Tiger Natural Gas, Inc.  
The Trane Company  
TRICOIL, Sensible Equipment Co.  
Trigen Development Corporation  
Tubular Skylight, Inc.  
UE Systems  
U.S. Department of Energy  
US DOE, NETL  
Veris Industries, LLC  
VESTAR  
Washington Power & Light, Inc.  
WaterFurnace International, Inc.  
Waterless Co. LLC  
Water Management Services, Inc.  
The Watt Stopper, Inc.

## Help Expand the Expo and You Might Win a Prize!

Do you know of a company that might be interested in exhibiting at Energy 2001?

Refer a vendor who becomes a new Energy 2001 exhibitor and your name will be entered in a drawing to win a free full-conference registration for Energy 2002. Just provide us with the contact information for the company and some general information on their product/service, and we'll take it from there. One prize entry will be credited for each lead provided when the company signs up as an Energy 2001 exhibitor.

Just send the information to Exhibit Promotions Plus, Inc., [energy@epponline.com](mailto:energy@epponline.com). Call them at 410-997-0763, or fax to 410-997-0764.

Remember, this must be a vendor who did not exhibit at Energy 2000.

# Registration Form



Registration includes all sessions, breaks, meals, social functions and the product exposition.

The registration fee is \$495. Note "early bird" and team discounts below.

**Important Note:** Please do not mail, e-mail or fax registrations or register on-line after May 25. Bring all registrations after that date with you to the workshop site.

To register, complete the required information below. Please print clearly.

First name: \_\_\_\_\_ Last name: \_\_\_\_\_  
Title: \_\_\_\_\_ Name on badge: \_\_\_\_\_  
Organization/Company: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip code: \_\_\_\_\_  
Business phone: ( ) \_\_\_\_\_ Fax: ( ) \_\_\_\_\_  
E-mail address: \_\_\_\_\_  
Special Needs: ( ) Vegetarian meals ( ) Other: \_\_\_\_\_  
Emergency contact: \_\_\_\_\_ Phone ( ) \_\_\_\_\_

## Registration Fee: Select One

- ☐ "Early Bird" registration – \$395  
(postmarked by March 31)  
☐ Team Discount – \$350 each  
(4 or more, postmarked by March 31).

A Team Discount is available for 4 or more registrants from the same organization who register at the same time. Forms must be postmarked by March 31. The fee will be \$350 per team member.

- ☐ Regular Registration – \$ 495  
(After March 31)  
☐ One-day Registration – \$295  
☐ Monday ☐ Tuesday ☐ Wednesday

## Technical Tour Registration: Optional

- ☐ Tour 1 ☐ Tour 2  
\_\_\_\_\_ number of people x \$25 each

Total: \$ \_\_\_\_\_

Note: See Tour details on page 6. Space for the tours is limited. Please sign up early!

## Method of Payment: Select One

- ☐ Government training form ☐ Check  
☐ Money order ☐ Company Purchase Order

Please make your check, money order or purchase order payable to:

Florida Solar Energy Center, Energy 2001

- ☐ American Express ☐ VISA ☐ MasterCard ☐ Discover

Credit card number: \_\_\_\_\_

Exp. Date: \_\_\_\_\_

Card holder's signature: \_\_\_\_\_

Mail this form with payment to:

Energy 2001  
1679 Clearlake Road  
Cocoa, FL 32922-5703

[Note: Florida Solar Energy Center FEID# is 59-2924021]

**Cancellation Policy:** The registration fee, minus a \$50 service charge, will be refunded for cancellations received prior to May 25. No refunds after that date. You may substitute attendees at any time by sending written notice of the change prior to May 18 (fax to 321-638-1010). After that date, please bring the information to the on-site registration table at the conference.



**Energy 2001**  
1878 Clearlake Road  
Cocoa, Florida 32922-5703

*"Energy 2000 provided the  
networking, technical information,  
inspiration and leadership that are  
so important for all of us in order to  
succeed in our energy conservation  
efforts. FEMP continues to do a  
remarkable job in bringing it  
all together."*

— Paul Fennewald  
USPS, Interagency Energy  
Management Task Force Member



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